



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,220	09/29/2000	Minoru Nakano	3094/FLK	1221

7590 01/28/2003

Katten Muchin Zavis Rosenman  
575 Madison Avenue  
New York, NY 10022-8800

EXAMINER
----------

EVERHART, CARIDAD

ART UNIT	PAPER NUMBER
----------	--------------

2825

DATE MAILED: 01/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Office Action Summary**

Application No.

09/675,220

Applicant(s)

NAKANO ET AL.

Examiner

Caridad M. Everhart

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9-17-02.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14-20<sup>and 21</sup> is/are pending in the application.
- 4a) Of the above claim(s) 14, 18 and 19 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-12, 15, 16 and 20<sup>17 and 21</sup> is/are rejected.

7) ☒ Claim(s) ~~4~~ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### Supplemental Action

This action supercedes the previous Office Action mailed 11-27-02. This action is in response to a telephone interview with applicant's representative in which applicant's representative indicated that claim 21 had not been included in the Office Action Summary and in the Office Action.

The indicated allowability of claim 17 is withdrawn in view of the prior art of record. Claim 17 should have been included in the rejection of claim 11.

Newly submitted claims 18, and 19 and amended claim 14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The claims are drawn to an apparatus which could be used to carry out other and materially different processes such as heating a substrate to a given temperature and maintaining that temperature as a step in a process.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14, 18, and 19 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2825

Claims 2<sup>and</sup> 12, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of the word "predetermined" renders the claim indefinite because the word predetermined reads on a nebulous mental step conducted prior to the manipulative steps of the claimed invention, hence rendering the present process claims unclear in meaning and scope.

Claim 12 fails to further limit claim 1 upon which it depends, as no further process steps are recited and no further process limitations are recited.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 9, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson.

The reasons are as stated in paper No. 3.

Applicant has argued that Anderson does not teach determining a set of power ratios, but rather uses an empirically derived points which are entered by the operator.

Application/Control Number: 09/675,220  
Art Unit: 2825

This argument is respectfully found to be unpersuasive because claim 1 recites "determining a set of power ratios", and it is believed that Anderson discloses the step of determining a set of power ratios(col. 8, lines 3-15), which reads on the claim language. Anderson teaches a determining step and a controlling step. It seems that Anderson also teaches using the target temperature as a reference(col. 7, lines 63-67).

Claims 3-8, 10, 11, and 15-17<sup>20, 21</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson as applied to claim 1 above, and further in view of Halpin, et al. (US 6,113,702).

The reasons are as stated in paper No. 3.

In addition, Anderson discloses the detecting and heating of central portions and peripheral portions of the wafer independently (col. 7, lines 11-24 and 33-37). The disclosure made by Anderson encompasses that the temperatures may be different(col. 9, lines 5-10 and 32-35).

Applicant's arguments are respectfully found to be unpersuasive primarily because it is considered within the ordinary skill in the art to calculate the power ratios with the temperature measurements made by Anderson in view of Halpin. With respect to claim 11 and the placement of temperature detection devices, Halpin discloses temperature sensing at the center and near the periphery of the wafer(col. 8, lines 33-48).

With respect to the combination of Anderson and Halpin, it is believed that the support taught by Halpin would have been within the ordinary skill in the art to combine

with Anderson, as Anderson is silent with respect to the details of the wafer support, so that one of ordinary skill in the art would have been motivated to have used any support such as that disclosed by Halpin which provides good temperature control. With respect to the independent control of the temperatures in two portions of the substrate, Anderson discloses control of the temperatures in two portions of the substrate(claim 10).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caridad M. Everhart whose telephone number is 703-

Art Unit: 2825

308-3455. The examiner can normally be reached on Monday through Fridays 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
**CARIDAD EVERHART**  
**PRIMARY EXAMINER**

C. Everhart  
January 25, 2003